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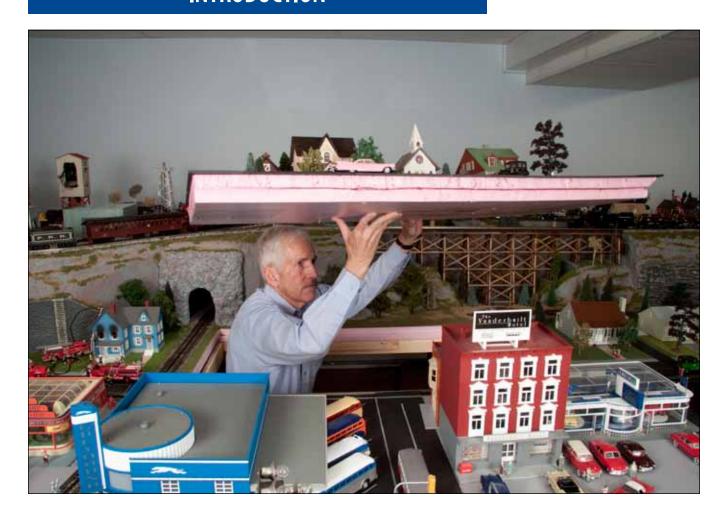
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INTRODUCTION



Simple scenery

Ranging from lightweight foam insulation board to ready-made trees, my O gauge layout employs numerous contemporary materials and techniques that can be used to develop unique toy train scenery.

Model railroading can be a fine art, and as with any artistic endeavor, the best results often come from experimentation, trial and error, and just plain hard work. After more than five decades in the hobby, and having built over two dozen layouts in four different scales, I have encountered my share of problems. As the old adage states, necessity is the mother of invention, and I have developed a number of construction and scenery techniques that produce results quickly and easily. I hope you will find these ideas helpful. However, feel free to develop your own variations on any of the ideas in this book. There are many different approaches to building scenery, and the more you experiment, the more satisfaction you will derive from the hobby. Above all, have fun. That's what toy trains should be all about.



Rigid foam board (left) and foam core illustration board (right) are versatile and readily available products that can be used to initiate numerous scenery projects.

In this book, I present ways to add scenery to a toy train layout that are simple to do and provide a layout with a satisfying appearance. These methods are aimed at taking a model railroad off a plywood tabletop and onto a base that facilitates building scenery with foam and other easy-to-use materials.

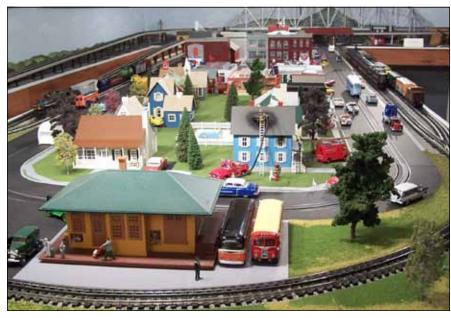
Creating scenery for a layout entails more than randomly adding some trees, mountains, and water. It includes adding streets and grade crossings, building structures, ballasting track, and making mini scenes. While this may sound like a lot of work and seem very realistic, it doesn't forget the fun of operating toy trains. I also show you how to incorporate animated accessories, build a geode mine, and feature a good ol' swimmin' hole.

Many of the techniques featured throughout the book make use of two versatile and readily available products: foam core illustration board and rigid foam insulation. The former is available from stationery stores, office supply stores, or art supply dealers, while the latter is sold by home supply stores.

Foam core illustration boards come in a variety of colors. The most useful colors for model railroads are black, gray, and white. Most have a white core, although the black variety can



In addition to foam, polyurethane, rubber, and other flexible materials form useful scenery products, including the Pennsylvania Shale Cliff (left), the Palisades Sheer Wall (center), and tunnel portal components (right) available from Scenic Express.



Through years of experimentation, my quick and easy techniques have produced pleasing layout scenery, including this intriguing city scene.

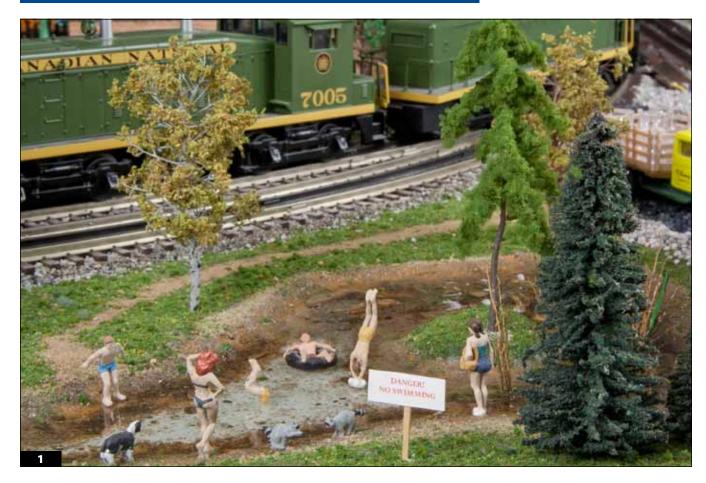
also be obtained with a black core. This all-black version is useful for modeling asphalt streets. Illustration boards may also be used to build simple structures (Chapters 5 and 8) and used as a base for scenic plots (Chapters 4, 6, and 7). Common illustration board is $\frac{3}{16}$ " thick and comes in various sizes such as 8×10 , 11×17 , and 20×30 .

Rigid foam insulation board comes in 2' x 4' panels in thicknesses up to 2", and may be pink or blue in color. Although these boards are dense and essentially self-supporting, they are very lightweight. The pink and blue varieties should not, however, be con-

fused with commonly available sheets of white insulation, which are much less solid and prone to flaking. White foam panels are too flimsy for most modeling applications.

Along with foam, we'll use a variety of readily available commercial specialty products. Made from polyure-thane, rubber, and similar materials, these products are molded into walls, tunnel portals, and other handy scenery elements. Available from hobby suppliers, these parts are easy to work with, and you can achieve satisfying scenic results in a relatively short time without any special skills.

CHAPTER FIVE



Ponds, water, and below-grade scenery

Using foam insulation board as a train layout tabletop makes it possible to create variations in terrain level by simply adding layers of foam or carving away chunks. I made this pond scene by carving into the foam using a hot wire tool.

One of the most significant advantages of a rigid foam layout top is the ease with which you can dig out areas to include scenic features below grade, such as lakes, rivers, ponds, and gullies. To show you how easily this can be done, let's create an ol' swimmin' hole, nestled into an unused corner of the layout, 1.



A round-tipped blade fitted to a hot wire tool makes it easy to carve out a shallow pond.



After carving out the pond profile, coat the area with a layer of drywall compound.



Allow the compound to dry before painting. While the paint is wet, add brown turf, sand, and stones along the shoreline.



Scenery manufacturer Scenic Express offers supplies for adding cattails, reedy stalks, and miscellaneous debris to a pond.

The ol' swimmin' hole

A lake, pond, or swimming hole is easy to build. With a round-tipped blade mounted in a hot wire tool, carve out a shallow pond, 2. Note that I've left a small raised area in the middle, which will become an island. You need not dig down too deeply. You can create the illusion of depth of water by the way you paint the bed of the pond.

Coat the area with a layer of drywall compound, 3. This layer should be extra thick because it has to contain the water without allowing it to leak through into the foam. The surface can be smooth or rough—it doesn't matter because the bottom of the pond will be covered with gravel and miscellaneous debris.

When the drywall compound has cured, and after filling any cracks that develop, use various colors of paint to cover the bottom. I used light blue for the swimming area where the bed of the pond might be sandy and the water would be relatively clean, and muddy brown for the perimeter and swampy area. While the paint is still wet, sprinkle some gray-brown turf and light-colored sand and rocks along the shoreline, 4.

For the swampy area of the ol' swimmin' hole, I used some of the supplies that came with a Reeds and Cattails Kit from Scenic Express (EX0247). In addition to some exquisitely formed cattails, this kit contains lichen, reedy stalks, and other materials

that you can use to simulate a backwater area, **5**. Following the instructions that come with the kit can help you create a convincing scene.

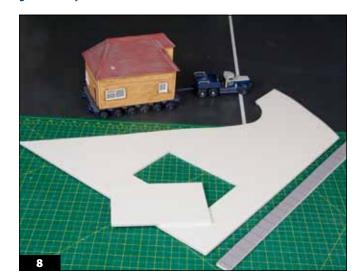
Plant the reeds, cattails, and debris in a generous layer of matte medium, 6. (Matte medium looks white when applied, but turns clear when dry.) Grass and weeds have grown up along the banks, and rocks and submerged branches surround the island. All of these turf products are easy to add—just sprinkle them over wet dirt- or sand-colored paint and allow everything to dry. I also added a dirt path between the pond and the train tracks and covered the low-lying island in the middle of the pond with weedy vegetation.



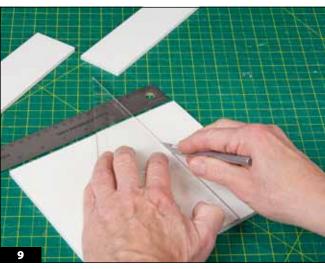
In this photo, reeds and cattails are secured into place using a generous layer of matte medium.



After allowing the paint and matte medium to dry overnight, pour two-part resin in the pond to model water.



You can use foam core illustration board to model a house foundation. Construct a basement floor, walls, and an inside stairway.



Measure and cut five rectangular pieces of foam core board and assemble them into the foundation.

Once the paint is dry, the scene is ready for you to pour the water, which is a two-part chemical compound that comes with the Reeds and Cattails Kit, 7. It is important to mix the two parts thoroughly to ensure that everything will dry thoroughly and set hard. If you need more water, several similar products are available from various manufacturers that make very convincing water.

The compound is quite viscous and flows slowly, but it will seek its own level and work its way in among the reeds and cattails to cover the rocks and debris. Be sure everything on the bottom is firmly attached before pouring. Use extra matte medium to hold down anything that seems to be loose,

or it will float to the surface when you pour in the water.

The Reeds and Cattails Kit comes with a small straw that is used to eliminate bubbles from the surface. Blow gently through the straw all across the surface of the water until it appears uniformly smooth. As it dries, the water will darken in the debris-filled areas of the pond.

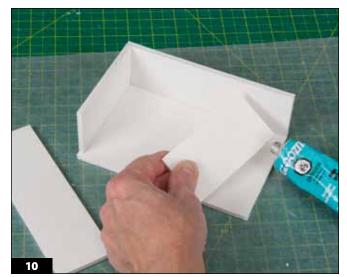
To make the swimmin' hole come to life, you will need to add a variety of details to the scene such as several trees, including one on the little island, people of all ages enjoying the water, a pair of fearless raccoons, and a dog, 1. I made the No Swimming sign using a word processing program on

my computer and printed it out in an 8-point font.

Moving in

Here's another fun idea for a scene that involves below-grade scenery. A few years ago, Corgi (www.corgi.co.uk) released an interesting house-moving set, consisting of a small home resting on a trailer and pulled by a truck (T989). Why not create an empty lot on your layout with a basement foundation, where the house movers can deliver their burden?

Cut a piece of illustration board to fill an unused corner of the layout where the house will be located, just as you did for the homes in Chapter 4.



To assemble the foam core into a basement, you can use contact cement as well as model glue, rubber cement, or carpenter's glue.



Attach thin strips of balsa or basswood to the perimeter of the rectangle to simulate sills at the top of the foundation.



Let the glue along the sill pieces dry thoroughly, add a stairway, and then coat the entire foundation with gray, concrete-colored paint.



To install the foundation, first outline its shape on the tabletop. Then carve along the outline to create an opening for the foundation.

Also make a length of sidewalk from a strip of gray illustration board. Remove a rectangle the same size as the perimeter of the house to make room for the foundation, 8. The next step is to construct a basement floor, four basement walls, and an inside stairway.

Foam illustration board is an excellent material for making simple structures, **9**. Measure and cut out five rectangular pieces for the walls and floor of the building's foundation and glue them together with carpenter's glue, contact cement, plastic model glue, or rubber cement from a stationery store, **10**. All of these products work well to fasten pieces of this material together, although the carpenter's

glue takes the longest to dry, so avoid it if you are in a hurry. The side walls should be about 2" high, representing a typical 8-foot foundation.

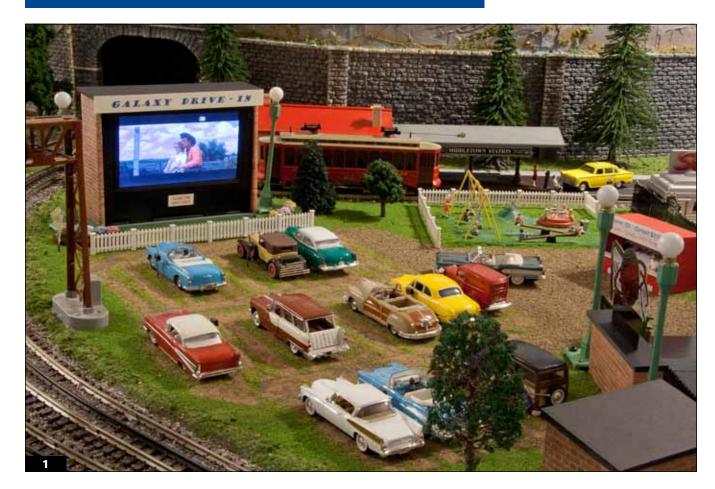
Now glue the foundation into the rectangular opening of the vacant lot panel. The walls should protrude a scale foot (¼") or more above the top surface. Glue thin strips of basswood or balsa around the perimeter of the foundation to simulate sills, 11.

Build a staircase out of ¾"-wide strips of illustration board. Each descending strip should be a scale 9" (¾6") longer than the one above it. It will take 10 strips to complete the stairway. Install it in one corner of the foundation, 12. Paint everything gray to simulate concrete.

To place the foundation on the layout, you will have to cut a hole in the tabletop for it to fit into, 13. Be sure to put the hole in the right place. Remember the old adage—measure twice and cut once. Complete the scene with your choice of turf, grass, or piles of dirt. Add a few workmen and a wheelbarrow, and drive the truck and trailer up to the lot.

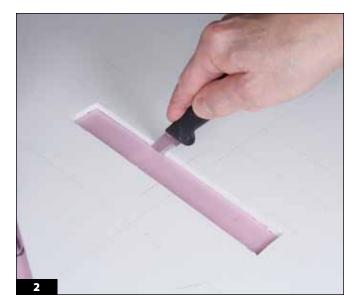
Now that your miniature people have places to live and play, they need roads to travel on. Foam core illustration board is the perfect material for this. Let's build some city streets and blend them in with accessories that have raised bases. We'll also examine how to construct grade crossings.

CHAPTER EIGHT



Creating a layout centerpiece

Modern technology meets 1950s Americana in this twilight drive-in movie scene. Every layout should have a centerpiece, something unusual that visitors will find especially interesting. While many model railroads rely upon readily available commercial items to stimulate interest, such as the operating accessories made by Lionel, MTH, and others, it's the unexpected features you create yourself that will make your railroad memorable. Here's an idea for one such display—a miniature drive-in theater right out of the 1950s, using today's technology, 1.



To build a DVD drive-in, first cut a screen-width slot into a piece of foam core board. Use the slot to guide a cut in the foam tabletop.



Test that the screen and additional components of the DVD player fit through the slot and function properly.



Use a sharp hobby knife to cut black foam core board into the pieces needed to build an enclosure for the DVD player.



After assembling the enclosure, paint a gray strip along the base to simulate a concrete foundation.

A portable DVD player or tablet with a 7" or 8" screen is the perfect size to re-create a drive-in for an O gauge layout. It looks good in daylight and is especially effective when the room lights are dimmed to suggest a twilight showing. All you need to make the scene authentic are several simple structures built from foam core illustration board, some model cars, and a few small details.

Choose a location for the theater where the screen will be clearly visible. Cut out an illustration board to fit the area as described in previous chapters.

Measure the base of the DVD player and cut a slot in the board, **2.** Using a thin-bladed kitchen knife, also cut a hole in the rigid foam table top the same size as the slot. (If you have a plywood table, you will need a keyhole saw for this step.) The DVD player will be inserted through the holes and placed upright to represent the drive-in screen. (Portable tablets will fit a little differently in the hole.)

Be sure to buy a DVD player that opens to a full 180 degrees. The base of the player should fit snugly when inserted in the slot, 3. Slide it in until

the lower part of the screen portion lies on top of the illustration board, while the rest of the mechanism is suspended below the table. It is important to be able to remove the player from the slot in order to turn the unit on and off and to change the movie disks.

Encasing the player

You will need an enclosure to disguise the true nature of the player. It's easy to build with foam core illustration board. Measure the player and construct a shallow box to fit over the screen. It should be just large enough so that the